

and Mount
How to Clean/a Skeleton: Cat

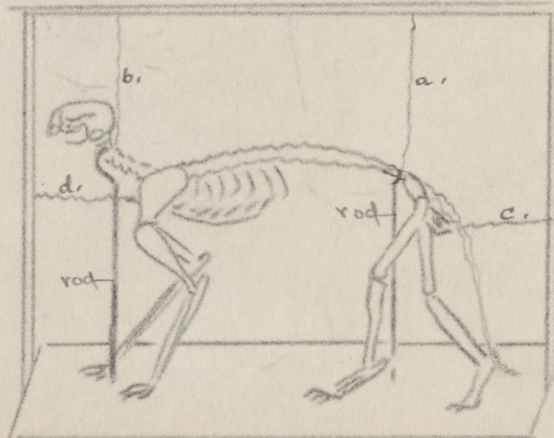
As Told by

E.J.Fischer

to
Hildegard Howard

1. Rough the body out of the skin no cooking.
2. Scrape all flesh from bones, leaving all ligaments in place/
3. Put scraped skeleton in a solution of peroxide (1qt. peroxide to two qts. water) and let stand for 48 hours.
4. Take skeleton out of peroxide and lay in sun to bleach (3or4days)
5. When bleached, begin mounting: run wire rod through the vertebrae and connect to head, bending rod to desired shape of body.
6. Construct fframe, with board which is to be used as base for the bottom of the frame and sticks at each end and across the top.
7. To this frame tie the skeleton in place with strings:
 - a. a string around vertebral column just anterior to pelvis, attached to top stick.
 - b. a string around neck (at atlas) to top stick also.
 - c. a string from posterior edge of pelvis stretched to back stick.
 - d. a string from one of the sternal segments " to front stick.
8. Wire legs to pelvis with wire through head of femur into acetabulum,
9. Wire scapulae together by passing a wire from one scapula through a spring, thence through the third thoracic spine of the vertebrae, through another spring on the opposite side and attached to the scapula of that side.
10. Adjust legs in position desired and regulate height of body to conform, by raising or lowering strings attached around vertebrae.
11. Measure distance from base board to vertebral column anterior to pelvis and from board to column anterior to ribs, and cut heavy rods of this length plus enough to screw into board and (at opposite end) to fork around vertebrae to support skeleton (forking best done by splitting the rod in two for a shortdistance).
12. Screw rods into place on board, set under skeleton again and pin toes in position and tail (if it is to touch the board). Adjust rod support around the vertebrae.
13. Remove frame work (except, of course base board) and set aside to dry completely.

Complete process takes about a week.



After fifty-two years, Mancalla -- the Pliocene flightless auk -- has assumed substantial form. A mounted skeleton of the bird (which was first described from a single wing bone) ^{in 1901} has now been prepared for exhibition at the Los Angeles County Museum. As this skeleton is a composite mount, it seems advisable to record its preparation in order to answer some of the questions which necessarily arise concerning the accuracy ~~of proportion~~ of such specimens.

History of Mancalla

Mancalla holds the important position in California paleontology of being the first fossil bird discovered in the state. From an incomplete humerus of this bird recovered during the excavation of the Third Street Tunnel, Los Angeles, around the turn of the century, Lucas (1901) named the species Mancalla californiensis and described it as a flightless auk (p. 134) "more completely adapted for subaquatic flight than the Great Auk, although the wings were not so extremely modified as those of the penguins."

Subsequent discoveries of bones of Mancalla in San Diego and in a road cut near Corona del Mar, from 1933 to 1947, have been recorded by Miller and Howard (1949). ^{number of separate bones recorded} The ~~total reported~~ at that time was 145 ~~separate bones~~. Continued search for specimens has now raised this to a total of 305. The assemblage from San Diego comprises the bulk of the material, the Los Angeles County Museum having 224 bones in its own collections from the San Diego area when selection of specimens for the mount was begun.

Although there are many duplicates ~~specimens~~ of certain elements, others were represented by only one or two good specimens. This fact, together ~~with a great variation in size among the more abundant elements, did not~~ ~~allow great freedom of choice in selection of the bones to mount.~~ ~~allow great freedom of choice in selection of the bones to mount.~~ ^{with a great variation in size among the more abundant elements, did not} allow great freedom of choice in selection of the bones to mount.

Starting with the one good pelvis available, ^{femora} ~~leg bones~~ were selected to fit the acetabulae, ~~and the tibiotarsi~~. The femora, in turn provided the key to size of the tibiotarsi. One specimen of the latter element was found with a tarsometatarsus, in a position which indicated that the (of the right side) two bones belonged to the same individual. These two bones/were used. left Bones of similar size were chosen for the ~~opposite~~/side. ~~Several~~ Three one of fairly good sterna were available. Of these, the medium size was selected

Completed with
delivered to Museum
by Mr. Otto Sept. 17, 1953

BONES OF MANCALLA in natural specimen - Aug. 1953

Kennell Dec 22/47	<u>1075</u> 2177	right tarso-metatarsus (complete)
Geo. June 1949	2275	left tarso-metatarsus (proximal 1/3 restored)
Kennell Dec 22/47	<u>1071</u> 2177	right tibiotarsus (complete)
Kennell 4.1.48	<u>1075</u> 2210	left tibiotarsus - distal end
Davis & Geo 1951	no number	left tibiotarsus - proximal end - (1/3 restored, middle of shaft)
Geo. May 47	2097	left femur (complete)
Davis & Geo 1952	no number	right femur (1/4 of distal end of femur restored)
Kennell Dec 47	<u>1071</u> 2182	pelvis (restored parts of ilium and thin bones of ischium and pubis)
Kennell Dec 47	<u>1071</u> 2205	skull (restored section between bill and part of frontal, also quadrate and margin of orbits)
ditto	2199	atlas (complete)
Geo June 49	2267	cervical vertebra (complete)
Kennell Apr 1948	2212	dorsal vertebra (complete)
Geo Feb 51	<u>1075</u> 2442	right humerus (complete)
Geo Jan 50	<u>1080</u> 2303	left humerus (complete)
Kennell March 48	<u>1074</u> 2243	right coracoid (complete)
Kennell Apr 48	<u>1075</u> 2208	left coracoid (lower 1/3 restored)
Kennell July 50	<u>1071</u> 2330	right scapula (distal half restored)
Kennell May 47	2070	left scapula (distal half restored)
Geo & Davis 52	121	right ulna (complete)
"	1095	left ulna (complete)
Kennell July 50	<u>1071</u> 2335	left radius (complete) - right radius restored
Kennell Apr 48	<u>1075</u> 2213	right carpometacarpus (complete)
Geo & Davis 52	101	left carpometacarpus (1/5 at distal end restored)
Geo May 47	2158	wing phalanx (complete)
Kennell Dec. 47	2193	wing phalanx (")
Davis & Geo 52	no number	wing phalanx (")
Kennell Dec 47	2194	foot phalanx (")
Kennell Aug 50	2351	foot phalanx (")

1075

foot phalanx (complete)

*Kennel
Apr 48* 2215

foot phalanx (" "

*Davis Geo
52*

no number foot phalanx " "

*Kennel
May 48* 2249

foot phalanx " "

*Kennel
Apr 47*

2063

sternum (restored lower 1/3 also part of spine & thin area
in upper part bordered by thicker bone)

*Kennel
May 47*

2094

part of clavicle (restored with exception of right process)

Recent Material of California Murre used in
Mancalla Mount

Bi 507 mandible

Bi 507 left fibula

Bi 507 right fibula

Bi 507 1 ungual phalanx *others unguals?*

Bi 507 9 dorsal vertebrae

Bi 507 11 cervical vertebrae

Bi 507 11 uncinat processes

Bi 494 4 uncinat processes

Bi 485 11 caudal vertebrae

Bi 494 10 right phalanges *pedal including ungual*

Bi 494 7 left phalanges *pedal* " "

Bi 507 19 ribs

Bi 494 1 last rib

Bi 507 18 sternal ribs

~~Bi 494 2 first ribs~~

*quadrate
unguals*